The global financial crisis: what happened and what’s next

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<td>Asset-backed commercial paper</td>
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<td>ABX</td>
<td>Asset-backed securities Index</td>
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<td>AIG</td>
<td>American International Group, Inc.</td>
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<td>AMLF</td>
<td>ABCP Money Market Mutual Fund Liquidity Facility</td>
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<td>BNDES</td>
<td>Banco Nacional de Desenvolvimento Econômico e Social (Brazilian Development Bank)</td>
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<td>CAF</td>
<td>Corporación Andino de Fomento (Andean Development Corporation)</td>
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<td>CDOs</td>
<td>Collateralized debt obligations</td>
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<td>CDSs</td>
<td>Credit default swaps</td>
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<td>CLOs</td>
<td>Collateralized loan obligations</td>
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<td>CPFF</td>
<td>Commercial Paper Funding Facility</td>
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<td>CPP</td>
<td>TARP Capital Purchase Program</td>
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<td>EESA</td>
<td>Emergency Economic Stabilization Act</td>
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<td>FDIC</td>
<td>Federal Deposit Insurance Corporation</td>
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<td>FED</td>
<td>Federal Reserve System</td>
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<td>FHFA</td>
<td>Federal Housing Finance Agency</td>
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<td>FLAR</td>
<td>Latin American Reserve Fund</td>
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<td>FOMC</td>
<td>Federal Open Market Committee</td>
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<td>G7</td>
<td>Group of Seven</td>
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<td>G20</td>
<td>Group of Twenty</td>
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<td>GSE</td>
<td>Government-sponsored enterprise</td>
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<td>IADB</td>
<td>Inter-American Development Bank</td>
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<td>IFC</td>
<td>International Finance Corporation</td>
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<td>IFIs</td>
<td>International Financial Institutions</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>M&amp;A</td>
<td>Mergers and acquisitions</td>
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<td>MBSs</td>
<td>Mortgage-backed securities</td>
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<td>MDBs</td>
<td>Multilateral development banks</td>
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<td>MMIFF</td>
<td>Money Market Investor Funding Facility</td>
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<td>MSCI</td>
<td>Morgan Stanley Capital International</td>
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<td>NBER</td>
<td>National Bureau of Economic Research</td>
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<td>PDCF</td>
<td>Primary Dealer Credit Facility</td>
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<tr>
<td>RJ/CRB</td>
<td>Reuters-Jeffries Commodities Research Bureau Index</td>
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<tr>
<td>R&amp;D</td>
<td>Research and development</td>
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<tr>
<td>S&amp;L</td>
<td>Savings and loans</td>
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<tr>
<td>SEC</td>
<td>Securities and Exchange Commission</td>
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<td>SIV</td>
<td>Structured investment vehicles</td>
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<td>SMEs</td>
<td>Small and medium-sized enterprises</td>
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<td>SOMA</td>
<td>System Open Market Account</td>
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<tr>
<td>TAF</td>
<td>Term Auction Facility</td>
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<td>TALF</td>
<td>Term Asset-Backed Securities Loan Facility</td>
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<tr>
<td>TARP</td>
<td>Troubled Assets Relief Program</td>
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<tr>
<td>TLGP</td>
<td>Temporary Liquidity Guarantee Program</td>
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<tr>
<td>TSLF</td>
<td>Term Securities Lending Facility</td>
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Abstract

Global economic conditions have been deteriorating sharply since mid-September 2008. Lending has dropped abruptly, credit spreads have widened sharply, stock markets have plunged and economies everywhere are stumbling. Governments around the world have undertaken unprecedented measures, including some coordinated intervention. However, global economic prospects remain troubled, and further policy action is required.

In order to better understand the task before policy makers as they chart a new direction, this paper examines how the global economy arrived at its current predicament, looking back at the sequence of events that contributed to create havoc in financial markets, as well as the policy response they produced. In light of these events, we examine the impact on Latin American financial markets in particular.

The global nature of the current crisis underscores the need for coordinating the policy response at the global level, as well as advancing towards a new international financial architecture that will make possible a more effective response to the build-up of systemic pressures.
Introduction

The world economy faces a deepening crisis. Since mid-September 2008, global economic conditions have deteriorated sharply. The bankruptcy of Lehman Brothers has marked the beginning of a period of unraveling in world financial markets, with trust among financial institutions evaporating. Lending has dropped precipitously since then, credit spreads have widened sharply, stock markets have plunged and economies everywhere are stumbling. Financial institutions and hedge funds in developed economies are rapidly pulling out massive amounts of money from emerging markets. International lines of credit, the lifeblood of international transactions, have also frozen, affecting trade and leading to reduced export earnings.

Governments have undertaken unprecedented measures in response to the financial crisis, including some coordinated government intervention. However, global economic prospects remain troubled, and further policy action is required in the near future. A consensus has emerged that the policy response to the current crisis, given its global nature, should be coordinated. Coordinated action to reform the financial system will also be essential to address weaknesses in financial markets around the world.

The Group of Twenty (G20) countries1 agreed to a set of common principles to reform financial markets. It may still be early to identify all the necessary steps to successfully reform the global regulatory system when it is not clear yet all the lessons that can be

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1 The G20 includes 10 major emerging economies – Argentina, Brazil, China, India, Indonesia, Mexico, Saudi Arabia, South Africa, South Korea, Turkey – along with members of the G8 – Canada, France, Germany, Italy, Japan, Russia, United Kingdom, United States – Australia and the European Union (represented by the rotating Council presidency and the European Central Bank).
learned from the current crisis or how much of regulation should be transnational. However, it is important that countries start the process of discussing a new framework that would reflect their financial interconnectedness. The November 2008 summit was a first step on the road to define the right framework for the international financial architecture of the 21st century.

In order to better understand the task before policy makers today as they chart a new direction for their economies, this paper examines the events that led the global economy to its current predicament. We start by looking at the current debate about the causes of this crisis, listing the elements most explanations have focused so far. In the second section, we look back at the sequence of events that contributed to create havoc in financial markets, as well as the policy response to these events. Next, we discuss the impact on Latin American financial markets and how this crisis may bring the region’s expansion of the past six years to a halt. In the fourth section, we discuss how the world leaders can move forward, focusing on the G20 Summit that took place in November 2008. Finally, we offer some final thoughts on the initial lessons from this crisis, as well as suggestions on what the priorities should be as the world economies respond to the challenges ahead.
I. How a financial firestorm was ignited

The world economy and financial markets are facing an unprecedented crisis. How the crisis originated is still the subject of much debate. George Soros, for example, has asserted that “the crisis was generated by the financial system itself,” adding that the financial system is inherently flawed. Joseph Stiglitz says that mistakes were made “at every fork in the road,” identifying five key mistakes under three different U.S. Administrations as the causes of the current crisis (Stiglitz, 2009). Most of the immediate causes being offered, however, can be grouped under two encompassing views: global easy money and a savings glut that inflated a credit bubble, which eventually burst; and regulatory and supervisory failures.

A. Global imbalances

Money kept too cheap for too long in the aftermath of the 2001 recession is said to have fuelled a credit bubble. In 2002 and 2003, fearing Japan-style deflation, the Federal Reserve cut federal funds rate to 1% and kept it on hold for a year. Following this period of monetary easing, a period of monetary tightening began. Interest rates were raised between 2004 and 2006, but in a predictable and gradual way (see figure 1). Critics say that the Fed failed to tighten policy more quickly, and the predictability and gradualness of the tightening process encouraged broad risk-taking.

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2 According to Soros, the U.S. housing bubble actually acted as the detonator of a “super-bubble” that has been developing since the 1980s. The current crisis marks the end of an era of credit expansion based on the U.S. dollar as the international reserve currency, and is the culmination of a “super-boom” that has lasted for more than 60 years. (Soros, 2008a and 2008b).
behavior. The Fed’s decisions took place against the backdrop of rapid financial globalization and choices made by central bankers elsewhere. In many big emerging economies, authorities decided to link their currencies to the dollar.

FIGURE 1
FEDERAL FUNDS TARGET RATE
(Percentage)

In the view of Sebastian Mallaby, the credit bubble has its origins in a two-headed monetary order, where some countries allow their currencies to float, while others peg loosely to the dollar. China, the largest country to peg its currency to the U.S. dollar, kept its currency cheap over the past five years, driving rival exporters in Asia to also hold their exchange rates down. In Mallaby’s view, this pattern of competitive currency manipulation led to the accumulation of huge trade surpluses\(^3\), which were pumped back into the international financial system through the purchase of U.S. assets, inflating a credit bubble (Mallaby, 2008). The rapid rise of China’s saving surplus between 2004 and 2007 stemmed in part from this system of currency management, which led to a flood of capital to the United States and other rich countries\(^4\).

This flood of capital fuelled the financial boom by pushing long-term interest rates down. Long-term interest rates fell across the developed world and stayed low even as the Fed (and central banks in other developed countries) began tightening monetary policy in 2004. Alan Greenspan, then the Federal Reserve’s Chairman, called this situation a “conundrum.”

The monetary policy implemented by the Fed is believed to have followed an asymmetric approach. The Fed cut interest rates following the burst of the dot-com bubble. While easing monetary policy, a new bubble began to form, this time in house prices. By ignoring bubbles when they were inflating, whether in share prices or house prices, but lowering interest rates when those asset bubbles burst, the Fed ran a biased monetary policy that is said to have fueled risk-taking and precipitated the creation of global imbalances. The Fed’s view at the time, which can be gathered

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\(^3\) Emerging economies’ central banks now hold over US$ 5 trillion in foreign reserves, a fivefold increase from 2000.

\(^4\) In an opinion column in the Wall Street Journal in November 2008, Judy Shelton, author of “Money Meltdown: Restoring Order to the Global Currency System” (Free Press, 1994), says that “at the bottom of the world financial crisis is international monetary disorder. Ever since the post-World War II Bretton Woods system – anchored by a gold-convertible dollar – ended in August 1971, the cause of free trade has been compromised by sovereign monetary-policy indulgence.” She also adds that “some three-quarters of the massive derivatives market, which has wreaked the most havoc across global financial markets, derives its investment allure from the capricious monetary policies of central banks and the chaotic movements of currencies.”
from officials’ speeches, interviews and press releases, was that pricking asset bubbles was not the job of the Federal Reserve, and that housing markets, unlike stock markets, were largely bubble proof. These beliefs are often pointed as having contributed significantly to the financial turmoil that started in the subprime mortgage markets. There are technical factors within the markets that have turned this boom into such a toxic event, which will be discussed in the next section, but the essence of this first view of the crisis is that these factors cannot explain why the crisis broke out at the time when it did. The policy of easy money that came in response to the bursting of the dot-com bubble in 2000-01, the ensuing recession, and the 11 September 2001 attacks, was the spark that ignited the current financial firestorm we are in.

### B. Regulation and supervision

The long deregulatory road in the United States is often cited as a critical factor leading to the current financial crisis. In 1999, the United States Congress passed the Gramm-Leach-Bliley Financial Services Modernization Act, which repealed part of the Glass-Steagall Act of 1933, opening up competition among banks, securities companies and insurance companies, and removing barriers between commercial and investment banks. The Glass-Steagall Act prohibited a bank from offering investment, commercial banking, and insurance services. The new law let commercial banks, security firms and insurers offer an array of financial services. It also split up the oversight of different financial conglomerates among government agencies: the Securities and Exchange Commission (SEC) would oversee the brokerage arm of a company, bank regulators would supervise its banking operation and state insurance commissioners would oversee the insurance business, with no single agency having authority over the entire company. According to Stiglitz (2009), “when repeal of Glass-Steagall brought investment and commercial banks together, the investment-bank culture came on top. There was demand for the kind of high returns that could be obtained only through high leverage and big risk-taking.”

Financial markets haven’t been completely unregulated, however, and one can argue that it was not so much deregulation but the failure to regulate new instruments that was at fault. Regulation and supervision, as well as risk management, did not keep up with the pace of financial innovation, leaving room for excessive risk-taking and asset price inflation. Sometimes, even with regulation, investors and financial institutions try to find ways to get around it, that is, strict regulation of the regulated part can push activity into the unregulated part. For example, the Basel accord requires banks to set capital aside against contingencies in order to avoid defaults. This is costly, thus banks looked for ways around the rules by shifting assets off their balance-sheets. They did that through securitization, through the structured investment vehicles that held many subprime-mortgage assets, and by using Credit Default Swaps (CDSs) to cut the risk of borrowers defaulting. When markets unraveled, these assets threatened to come back onto the balance-sheets, a key cause of the current problems in financial markets.

Moreover, policy incentives to promote an increase in home ownership by extending lending to lower income households through Fannie Mae and Freddie Mac – the two government-sponsored giants of the mortgage market – contributed to predatory mortgage practices and are also mentioned as an important cause of the current turmoil. Although sponsored by the government, the two companies also ran into problems.

Despite discussions on the extent to which the current crisis is a result of deregulation or not, there is agreement that failures in financial regulation and supervision have occurred. Some of these failures are highlighted below:
• **Securitization**
  
  – The current models of securitization – the “originate and distribute” models – have flaws, since they reduce the incentive for the originator of a claim to monitor the creditworthiness of the borrower. Securitization led to the development of new exotic and illiquid financial instruments, relaxed lending standards and loss of accountability, as well as excessive leverage. The fast pace of financial innovation during this decade scattered subprime losses around the financial system to a degree never seen before. According to Nouriel Roubini (2008),

  “in the securitization food chain for U.S. mortgages every intermediary in the chain was making a fee and eventually transferring the credit risk to those least able to understand it and bear it. The mortgage broker, the home appraiser, the bank originating the mortgages and repackaging them into mortgage-backed securities (MBSs), the investment bank repackaging the MBSs into collateralized debt obligations (CDOs), CDOs of CDOs and even CDO-cubed, the credit rating agencies giving their AAA blessing to such toxic instruments: each of these intermediaries was earning income from charging fees for their step of mortgage intermediation process and transferring the credit risk down the line to other investors.”

• **Loosened lending standards**
  
  – As demand for MBSs rose, more loans were given to less creditworthy borrowers, and fewer conditions were imposed. Demand for complex mortgage securities led to a loosening of lending standards, which in turn drove the house prices higher. Computer models, based on recent price histories, underestimated how much financial innovation was pushing up house prices, understated the odds of a national house price decline in the U.S. and encouraged an explosion of debt.

• **Excessive and excessively pro-cyclical leverage**
  
  – Two features of the current financial system – high leverage ratios and reliance on short-term wholesale funding rather than retail deposits – left the system vulnerable to an abrupt change in market liquidity. Leverage was also pro-cyclical: cheap money encouraged leverage, which boosted asset prices, which in turn encouraged further leverage. The “originate and distribute” models contributed to greater aggregate risk-taking and rather than conducting to a more efficient dispersion of risks, they have led to a shift of risks towards institutions that could not adequately manage them. Investment banks, hedge funds and other features of the new financial world were forced to reduce the size of their balance-sheets faster than traditional banks when faced with a reduction in liquidity because of their high level of leverage, making the economy less (and not more) resistant to a shock. Once leverage reaches certain levels, the financial system becomes vulnerable to shocks that can cause a disastrous loss of confidence.

• **Lack of oversight of non-bank financial institutions**
  
  – The Basel capital adequacy rules and their proposed ceilings have provided banks with the wrong incentives by encouraging banks to shift credit into off-balance-sheet vehicles. The light regulation and supervision of non-bank financial institutions, or even non-existent regulation, such as in the case of hedge funds, combined with the more strict regulation of banks, led to significant regulatory arbitrage, i.e., a large share of the financial intermediation was relocated to non-bank financial institutions such as investment banks, hedge funds, money market funds, broker dealers, structure investment vehicles, conduits, etc. These institutions, which comprise the “shadow banking system,” are also highly leveraged, relying on short-term borrowing but with
revenues coming from long-term loans and investments, making them vulnerable to
bank-like runs on their liabilities.

- **Lack of transparency in the financial system**
  - Risky credit lines and off-balance-sheet vehicles led to a lack of transparency and
collision about the level of financial institutions’ exposure to risk. Risk was mispriced
and mismanaged, because the underlying methodologies were fundamentally flawed.
Most of the new financial instruments (such as collateralized debt obligations) were
not traded on organized exchanges; there was no centralized clearing and settlement,
making the system more opaque and more vulnerable to counterparty risk, the chance
that the party on the other side of the transaction fails to deliver.

- **Pro-cyclical regulation and accounting rules**
  - Bank regulation, based on flawed measurements of risk (flawed computer models) was
pro-cyclical. Risk models, whether using market prices or the ratings of credit rating
agencies, told banks that they were running less risk and were better capitalized than
they in fact turned out to be when the credit cycle turned. Pro-cyclical mark-to-market
accounting rules and the “fire-sales” it could spiral, is also cited as a contributor factor
to the current crisis.\(^5\)

  - Changes in accounting rules implemented by the financial accounting standards board
and the SEC over the past 15 years, “Fair Value Accounting,” is said to have
contributed to worsen the current situation. Fair Value Accounting dictates that
financial institutions holding financial instruments for sale (such as mortgage-backed
securities) must mark those assets to market. This principle becomes hard to implement
when trading of these assets freezes up, with very few transactions taking place, and at
very depressed prices. In the current situation asset prices keep being marked down to
unrealistic fire-sale prices, which may not be indicative of the losses that may be
realized over time (assets might be worth something in the future).\(^6\)

- **Rating agencies**
  - Credit ratings badly misjudged the risks associated with mortgage-based securities and
other new instruments. Rating agencies’ incentives were aligned in a way that led to
conflicts of interest, given that agencies are paid by issuers rather than investors and
had a large fraction of their revenues originating from rating complex structured
finance products. In addition, poor-quality data and information, with rating agencies
knowing little about the underlying risk of new complex and exotic instruments, led to
serious miscalculations.

- **System of compensations**
  - A flawed system of compensation has given bankers, managers and operators in the
financial system incentives to take excessive risks with investors’ money. Since a large
fraction of such compensation is tied to short-term profits, there is a big incentive to

\(^5\) Investors have relied heavily on rating agencies to act as a guide in the world of complex financial products in recent years. When
these agencies began to downgrade mortgage-linked securities, sometimes moving AAA securities to junk, confidence in the rating
process was shattered. Investors thus looked to markets to get a sense of these securities’ worth, but as trading of these complex
financial tools dried up, it became almost impossible to get real market prices. Investors and auditors started to use other sources of
valuations, such as the asset-backed securities index (ABX), which tracks the cost of insuring mortgage-backed bonds against default
and has tumbled since the beginning of the crisis.

\(^6\) During the savings and loans (S&L) industry’s crisis in the 1980s the U.S. 10-largest banks were loaded with third world debt that
was valued in markets at cents on the dollar. If those loans had been marked-to-market then, critics of the rule say, virtually every one
of these banks would have been insolvent and in need of rescue by U.S. authorities. However, supporters of the rule say that it only
makes visible what before was hidden, alerting authorities sooner on problems with the institutions’ capital base.
take larger risks than warranted by the goal of maximizing shareholders’ profits. However, even firms with compensation systems that encouraged their managers to lend carefully got into trouble. In both Bear Stearns and Lehman Brothers, employees owned a large part of the companies’ shares.

- **Incentive structures that encouraged risky behavior**

  - The policy incentive structures are not neutral, thus have a role in shaping financial markets. The government allows homeowners to deduct mortgage interest payments from their taxable income, creating an incentive to buy a house instead of renting it. The government also creates incentives that subsidize corporate leverage as well. Preferential treatment is given to corporate borrowing, as companies are encouraged to increase debt because tax codes favor debt over equity.

  - Also, Fannie Mae and Freddie Mac were encouraged to guarantee a wider range of loans in the 1990s. The GSEs increased their stake in real estate prices, and given their status, markets believed that the government would come to their rescue if they were threatened with failure. Increased lending by the GSEs is pointed as contributing to an environment conducive to risky mortgage practices by the private sector.
II. A sequence of events

The financial crisis that began in August 2007 in the United States’ subprime mortgage sector has entered its second year. During this period, house prices have declined, economic activity has slowed, and risk aversion has sharply increased. The U.S. government has made its most dramatic interventions in financial markets since the 1930s. The Federal Reserve has created new facilities to inject liquidity into the system, taken mortgage-backed securities into its books and facilitated the sale of Bear Sterns to JPMorgan. In two convoluted weeks in September 2008, the Treasury nationalized the country’s two mortgage giants, Freddie Mac and Fannie Mae; took over AIG, the world’s largest insurance company; together with the FDIC extended government deposit insurance to US$ 3.4 trillion in money-market funds; temporarily banned short-selling in over 900 mostly financial stocks; and pledged to take up to US$ 700 billion of toxic mortgage-backed assets on its books. The Fed and the Treasury were determined to avoid a banking disaster of the sort that precipitated the Great Depression. In total, the U.S. government expanded its gross liabilities by more than US$ 1 trillion in the second half of 2008.

The result of the deepening crisis and the measures implemented to fight it has been a changed financial landscape. The investment bank, which helped define Wall Street, all but disappeared. Lehman Brothers filed for bankruptcy protection, Bear and Stearns and Merrill Lynch have been engulfed by commercial banks and Goldman Sachs and Morgan Stanley have become commercial banks themselves. Money market funds, security dealers, hedge funds and the other non-bank financial institutions that comprised the “shadow banking system” have also been quickly changing.
The credit crunch spread to other developed countries, as well as to emerging markets, which since October 2008 have been experiencing more deeply the repercussions of the deleveraging and associated credit crunch in advanced economies. Policymakers in the U.S., and other developed and emerging countries as well, have taken several actions to restore market functioning, improve investor confidence, and to increase the availability of credit. Authorities worldwide have pledged to continue to act in a decisive manner until financial markets are stabilized, and have tried to assure markets that they will act in a coordinated fashion.


1. Easy monetary policy

The existing degree of leverage in credit markets was built over a number of years. The process was fuelled with the U.S. monetary easing in 2003-2004, when the Fed’s federal funds rate was cut to 1%. The low interest rate environment encouraged financial innovation and the use of leverage to improve returns, sparking an asset allocation shift into real estate and alternative assets such as hedge funds and private equity. The result was an extremely benign economic environment.

The strong and stable global economy lulled investors into a sense of false security, who began to behave as if volatility had all but disappeared. In early 2001, the average junk bond yielded around 900 basis points more than the ten-year Treasury bond. In May 2007, the spread had dropped to a 20-year low of 260 basis points (see figure 2)\(^7\).

\[\text{FIGURE 2} \]
\[
\text{HIGH YIELD SPREADS: 2001-2008} \\
\text{(Basis points)}
\]

\[\text{Source: ECLAC, on the basis of data from Merrill Lynch U.S. High-Yield Master II Index (H0A0).}\]

\(^7\) Since then, however, the high-yield spreads have increased with the deterioration of the financial situation, reaching 1500 basis points at the end of October 2008 and 2006 basis points in mid-December.
2. Securitization grows

During this period, Wall Street investment banks generated substantial fees by underwriting big volumes of mortgages, and the loans and high-yield bonds that funded leveraged buyouts (see box 1). The share of private mortgage-backed securities issuers doubled from 2003 to 2007 (to 18.8%), according to the Fed, while the share of the GSEs Fannie Mae and Freddie Mac, which dominated the U.S. home mortgage debt market with a share of 52% in 2003, fell to 41.1% in 2007. Depository institutions, such as banks, thrifts and credit unions held a share of 30.9% in 2007.

**BOX 1**

UNDERWRITING DEBT AND DISPERSING RISK

Underwriting is a way of placing a newly issued security, such as stocks or bonds, with investors. The underwriter assembles a pool of mortgages and divides them into “tranches” (slices), with different degrees of risks and returns. Each security is a slice of the deal’s risk. The original debt is thus sliced into collateralized debt obligations (CDOs) and collateralized loans obligations (CLOs), as well as other products. The various tranches are graded by rating agencies, and are then sold to hedge funds, pension funds, mutual funds and other investors. Foreign investors tend to buy the paper with the highest ratings, that is, the bonds that have first claim on the cash flows and collateral backing the loans. Hedge funds trying to offer clients market-beating returns tend to buy the lower-rated but higher-yielding paper, often using money loaned to them by the prime brokerage arm of the same investment banks that underwrote these loans in the first place.

The sale of underwritten debt takes place through complex chains. The debt is sold to structured investment vehicles (SIV), a class of big, mainly bank-run programs, designed to profit from the difference between short-term borrowing rates and longer-term returns from structured product investments. These programs typically invest in credit market instruments, such as mortgage-backed bonds and CDOs, and fund their purchases with short-term borrowings in which interest and principal payments are backed by financial assets. An “asset-backed commercial paper” (ABCP), which lasts for anything between a few days and a few months before needing to be refunded, is issued in exchange for short-term financing.

Source: prepared by the authors.

As securitization increased, everybody appeared to win: investors acquired high-yield assets that represented claims on a diversified group of borrowers; banks earned fees for originating loans without the burden to hold them on their balance-sheets, which would otherwise constrain their ability to lend to others. Securitization opened a new path to growth for banks, allowing them to borrow in the markets. Commercial banks were no longer limited to the slower and costlier business of attracting retail deposits.

The increase in securitization brought an increase in leverage. An important characteristic of these new securities (as well as other new instruments such as swaps, futures and options), is that a small initial position can lead to a much larger exposure.

3. Lending standards loosen, subprime mortgages grow

The Fed tried to reduce excess leverage by raising short-term interest rates from 1% in 2003-2004 to 5.25% by mid-2006. Higher interest rates meant higher mortgage costs and a reduction in home sales, as well as in the number of home loans to underwrite, which would likely diminish leveraged buyouts. In response, investment banks loosened their credit standards, agreeing to purchase lower-quality loans. Leveraged buyout financing also followed more relaxed rules, with deals becoming riskier, and with bigger companies being bought. Lowering standards worked out for a while: in 2006, investment banks collected almost 60% more from underwriting mortgages and other loans than in 2003. All that was done under the assumption that housing prices would always continue to rise, which was the post-war reality until the second half of 2006, when prices began to decline (see figure 3). Rising home prices concealed the risk for a while, but even a flattening of home prices would bring trouble. Subprime and nontraditional borrowers were highly dependent on a

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8 CDOs and CLOs are derivatives backed by pools of credits: CDOs comprise bonds, including high-yield and mortgage-backed securities, while CLOs consist of corporate loans, including those used to finance buyouts.
continuation of the housing boom, and the underlying assumption was that subprime borrowers would be able to continue to refinance their mortgages.

**FIGURE 3**

**UNITED STATES HOUSING MARKET**

*(Year-on-year percentage change / Months)*

*Home prices have declined since the second half of 2006*

Rising delinquencies in the U.S. subprime mortgage market and the impact on the securities backed by these mortgages led to a lack of confidence on anything backed by mortgages that were once considered the safest investment available. In 2001, the mortgage market was dominated by traditional long-term mortgages, which accounted for a share of 84%. That percentage fell to 55% in 2006, however, a remarkable growth of non-traditional mortgages. There was also a remarkable growth of subprime mortgages, which, by definition, are directed to people with impaired credit history: in 2001, subprime mortgage originations accounted for only 5% of the market, but in 2006 they accounted for 20% of all mortgage originations according to the Federal Deposit Insurance Corporation (FDIC). The most problematic aspect was the development of the “hybrid-arm” subprime mortgages, which started with a low interest rate for two or three years, but jumped higher after that. These mortgages accounted for 67% of the subprime mortgage in 2006, and were underwritten only on the basis of their initial interest rate, causing a fundamental collapse of the underwriting process. Moreover, a good percentage of these subprime mortgages with hybrid-arm were given on the basis of “stated” income.

**B. Defaults and delinquencies rise: mid-2006 to 2007**

Defaults and delinquencies began to rise in mid-2006. In February 2007, specialist lenders began to report losses for the fourth quarter of 2006, starting with the largest, Nova Star, a leading lender in nonconforming residential mortgage loans. The second-largest lender, New Century Financial Corporation, facing liquidity problems, had trading of its shares suspended by the New York Stock
Exchange over concerns about its ability to stay in business. By 2 April it declared bankruptcy. In May, UBS announced that it was closing its in-house hedge fund, Dillon Read Capital Management, folding it back into its investment banking arm less than two years after it was set up. In June, Bears and Stearns announced problems at two of its hedge funds. The news was followed by a number of other funds reporting significant losses in similar debts. In July, financing for the Alliance Boots and Chrysler buyouts, two of the biggest private equity-backed deals in the markets ran into serious difficulties, intensifying fears about the possibility of a sharp credit crunch.

1. Volatility spikes

Volatility spiked in July and August of 2007 as a result, with problems spreading to equities and to quantitative hedge funds that thrive on volatility but come unstuck when there are sudden changes in trading patterns. These problems became clear when Goldman Sachs was forced to pay US$ 2 billion of its own money to rescue its Global Equities Opportunities fund, after admitting that its highly regarded computerized fund failed to predict market turbulence. Fears about the U.S. subprime exposure also spread beyond the U.S. banks and small specialized lenders. BNP Paribas was forced to suspend activity of three funds holding asset-backed securities. Problems at German bank IKB resulted in a bailout by local banks on 2 August, and interbank interest rates in the overnight lending markets shot up as a result. The European Central Bank and later the Federal Reserve, the Bank of Japan, the Russian Central Bank and the Bank of Canada were forced to take action, supplying markets with short-term funding so that they could continue to function.

2. Liquidity dries

Uncertainty about losses led to an abrupt drying up of liquidity in the three-month interbank and commercial paper markets. The U.S. commercial paper market experienced record outflows, and asset-backed commercial paper programs faced increasing liquidity risks, with institutional investors in particular making a big switch from commercial paper to government securities, causing Treasury yields to decline (see figure 4).

![FIGURE 4](image-url)

**FIGURE 4**

**FLIGHT TO QUALITY: JUNE TO AUGUST 2007**

*(Percentage)*

_Spreads between U.S. Treasury Bills and commercial paper widened in August 2007_*

Source: ECLAC, on the basis of data from the United States Federal Reserve.
Banks refused to lend to other banks, partly because of the lack of transparency on their commitments to Asset-Backed Commercial Paper (ABCP) structures. Some banks carried off-balance-sheet risks, and this caused uncertainty about what risks a counterparty institution might be bearing and contributed to the drying up of liquidity in parts of the market. If an ABCP program is unable to rollover or extend commercial paper coming due, it must attain some sort of short-term financing or close and sell the underlying assets. Thus central banks around the world began taking measures to provide markets with enough liquidity to complete short-term transactions.

3. Policy response: the Term Auction Facility

From September to December 2007, the U.S. Federal Reserve cut the federal funds rate three times, for a total of 100 basis points, from 5.25% to 4.25%. On 6 December, in a joint session of the FOMC and the Board of Governors, Board members and Reserve Bank presidents met through a conference call to review conditions in domestic and foreign financial markets and discuss two proposals aimed at improving market functioning. The first proposal was for the establishment of a temporary Term Auction Facility (TAF), which according to the Fed’s minutes “would provide term funding to eligible depository institutions through an auction mechanism beginning in mid-December.” The second proposal was to set up a foreign exchange rate swap arrangement with the European Central Bank, and was considered “as a positive step in international cooperation to address elevated pressures in short-term dollar funding markets.” The Fed’s TAF, in conjunction with term financing from other central banks contributed significantly to easing funding strains in inter-bank lending markets, with a considerable narrowing of spreads taking place.

C. The financial turmoil intensifies: January – September 2008

On 21 January 2008, in a rare inter-meeting decision, the FOMC cut the federal fund target rate by 75 basis points to 3.5%. The cut was a response to the weakening of the economic outlook, as strain in financial markets intensified. A week later, at its scheduled meeting on 30 January, the Committee lowered its target for the federal funds rate again by 50 basis points to 3%. On 18 March, the FOMC cut rates once again by 75 basis points to 2.25%, as the economic outlook weakened further. Finally, on 30 April, the target for the federal funds rate was cut by 25 basis points to 2%. The FOMC met again in June, August and September, keeping interest rates on hold.

1. More Fed actions and the rescue of Bear Stearns

March 2008 was a busy month for the policymakers at the Federal Reserve. On 7 March, the Federal Reserve announced that it was making US$200 billion available to lenders through two channels. It raised the size of its TAF auctions to fight back against heightened liquidity pressures in financial markets, and it also unveiled another US$100 billion in new one-month repurchases operations primarily for investment banks, accepting pledged mortgage-backed bonds and even riskier assets as collateral. The intention of the Fed was to absorb some of the liquidity risk facing the markets by offering cash in return for relatively illiquid assets. The announcement was meant to

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9 Inter-bank lending hasn’t recovered since. More recently, the commercial paper market has been bolstered by purchases by the Federal Reserve through its Commercial Paper Funding Facility (CPFF) created on 7 October 2008, a facility that complements the Federal Reserve’s existing credit facilities to help provide liquidity to term funding markets. The Fed has also indirectly purchased ABCP through loans it offered to banks to buy ABCP from money market funds. As of 5 November, the Federal Reserve owned roughly 21% of the US$1.6 trillion commercial paper market. The latest trends suggest that short-term refinancing pressures may be waning.

10 Term inter-bank funding pressures were largely the result of the sharp decline in asset-backed commercial paper outstanding since mid-August, and a shifting in the demand for credit away from Money Funds and towards banks. The TAF program provides term reserves via the discount window rather than via the Fed’s System Open Market Account (SOMA) and the benefit of the TAF program is that it allows banks to lock in funding for a specified period of time (28 to 35 days).
reassure investors that they would be able to cash in securities if they want, and thus prevent a panic selling that could push asset values down and cause further economic damage.

On 11 March, in a second big intervention in three days, the Fed announced that it was pumping more cash into a tight credit market. The Fed revealed its boldest step yet to ease the credit crunch, saying that it would lend primary dealers in the bond market up to US$ 200 billion in Treasury securities for a term of 28 days and accept AAA-rated mortgage-backed securities as collateral in return. The initiative, called the Term Securities Lending Facility (TSLF), provides to a new set of financial institutions a chance to temporarily replace mortgage-backed assets – provided that they are AAA-rated securities – with Treasuries for periods of 28 days at a time. The dealers continue to bear the market risk of the assets provided as collateral, but the TSLF initiative took the U.S. central bank a step closer to the possibility of directly buying mortgage-backed securities. The FOMC also authorized increases in its existing temporary exchange-rate swap arrangements with the European Central Bank and the Swiss National Bank. The Bank of Canada and the Bank of England also extended their liquidity support operations. The total boost provided by the Fed with this announcement amounted to US$ 236 billion, and combined with the earlier announcement, the Fed provided a total of US$ 436 billion of new short-term funds.

The Fed also made an unprecedented loan of US$ 29 billion to facilitate the sale of Bear Stearns to JPMorgan in March, which extended the agency’s safety net beyond the banking system. The understanding was that the Fed made the decision by balancing the risk of creating the precedent of such lending, with the risk of other failures that could be triggered if Bear Stearns, the country’s fifth-largest investment bank, defaulted on its obligations. In the wake of the Bear Stearns rescue, pressure started to build in Congress for tighter regulation to be imposed on investment banks, since they were benefiting from access to the Fed discount window. Warnings about the Fed’s moves, which could lead to moral-hazard and greater risk taking, were also raised. Former Federal Reserve Chairman Paul Volcker, testifying on the response to the credit crisis in Congress, said he worried about the Fed’s balance sheet and that the Fed’s independence could be hurt by the wide variety of assets it had taken onto its balance sheet to fight the credit crunch.

On 16 March, the Federal Reserve Bank of New York was authorized to create a discount-window-like lending facility for 20 primary dealers – the Primary Dealer Credit Facility (PDCF). The credit extended would be collateralized by a broad range of investment-grade debt securities.

2. Treasury takes over Fannie Mae and Freddie Mac

Over the weekend of 6 September, the Treasury and Federal Housing Authority (FHFA) announced that the two largest housing government sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, were placed into “conservatorship” (under the legal control of the U.S. government). The move would “accelerate stabilization in the housing market” by bringing down the cost of home loans. The aim, in the words of Secretary Paulson, was “to protect the stability of the financial market and to protect the taxpayer to the maximum extent possible.” The federal takeover represented a dramatic move, essentially putting the government in charge of helping U.S. mortgages, as together Fannie Mae and Freddie Mac account for about three-quarters of all new mortgages.

3. Lehman Brothers files for bankruptcy, AIG receives emergency loan

One week later, in the weekend of 13 September, the U.S. financial system faced its worst moment since August 2007, as regulators and chief executives of the major financial firms met over the weekend in an attempt to find a way to contain the spreading damage from the mortgage and housing crisis. Lehman Brothers filed for bankruptcy protection and Merrill Lynch agreed to a US$ 50 billion takeover from Bank of America. The discussions over the weekend extended beyond
the problems at Lehman, with officials and private sector executives debating the system wide stress and a succession of companies which were also under severe market pressure, among them the American International Group Inc. (AIG), one of the world’s biggest insurers. At the end of the day on Monday, September 15, AIG’s problems were exacerbated by a wave of credit rating cuts. Fearing a financial crisis worldwide, on Tuesday, 16 September, the Federal Reserve agreed to lend US$ 85 billion in emergency funds to AIG in return for a government stake of 79.9% and effective control of the company. In a statement, the Fed said that “a disorderly failure of AIG could add to already significant levels of financial market fragility and lead to substantially higher borrowing costs, reduced household wealth and materially weaker economic performance.”

4. The Primary Dealer Credit Facility

In the wake of the demise of Lehman Brothers, the Federal Reserve announced a sharp easing of the terms under which it lends to primary dealers – most of whom are investment bankers – under the Primary Dealer Credit Facility (PDCF), taking a wider range of assets (equities, whole loans and sub-investment grade debt) as collateral. According to market analysts, the PDCF is now an almost perfect substitute for the “Tri-party repo market” – the market in which investment banks traditionally meet much of their short-term funding needs. However, other investment banks remained reluctant to borrow from this facility, fearing it would be seen as a sign of weakness, leading to increased market pressure.

The “stigma” problem with the PDCF explains why the Fed also announced it was broadening the range of assets that could be pledged in exchange for loans of government bonds under its Treasury Securities Lending Facility (TSLF) to include all investment-grade debt, increasing the facility’s size from US$ 175 billion to US$ 200 billion and also increasing the frequency of its auctions. The two announcements were meant to calm markets as they headed into a period of risky trading environment, with Lehman’s massive market positions on the verge of being unwound. In addition, eleven of the world’s biggest banks created a US$ 77 billion liquidity fund to support other vulnerable institutions, another initiative intended to mitigate the impact of Lehman’s failure.

5. Money market fund “breaks the buck”

Despite all government’s efforts to contain the spreading damage from the mortgage and housing crisis, the panic that ensued reached historic levels. The US$ 85 billion emergency Fed loan for the troubled AIG announced on 16 September, failed to curb the surge in risk aversion. One cause for anxiety came when, for the first time in 14 years, shares in a money market mutual fund, considered a safe investment, fell below par value – or according to the market terminology, “broke the buck” – because of losses related with the failure of Lehman Brothers. This raised the risk that retail investors in other such funds could panic and pull out their money. Money market funds attracted massive inflows in the past year as investors searched for a safe haven in the middle of credit market turmoil and wavering stock markets. Companies all over the world depend on commercial paper for short-term borrowings, which they use for everything from paying salaries to buying raw materials, but as jumpy money-market funds pulled out, the market all but froze. Once again, a flight-to-quality followed, with investors looking for the safety of short-term Treasuries. The yield on the three-month bills fell to as low as 0.02%, levels that typified the “lost decade” in Japan. The last time U.S. Treasury bills’ yields were that low was January 1941. Gold, meanwhile, had its biggest one-day gain ever in dollar terms, and lending between banks came to a halt (see figure 5).
On 18 September, reaching an international consensus to tackle the problems afflicting financial markets, the world’s main central banks unveiled an emergency US$ 180 billion injection of dollar liquidity. The U.S. Federal Reserve announced it was making available the extra funding to overnight and longer-term money markets, but channeling all of it to banks outside the U.S. that do not have access to its onshore lending facilities. The other big central banks would act as intermediaries, making these dollars available to financial institutions in their own jurisdiction. In a joint statement, The European Central Bank, the Bank of Japan, the Bank of England, the Bank of Canada and Swiss National Bank pledged they would “continue to work closely together and will take appropriate steps to address the ongoing pressures.” This was the first coordinated move that was global in reach and huge in scale.

The U.S. Treasury Department also announced on 19 September, that it would set a temporary insurance program for the U.S. money market fund industry – which holds US$ 3.4 trillion – as part of its efforts to address the financial crisis. Regulators had been concerned for some time that money market funds were viewed as safe as a bank account, although they did not have the same Federal guarantee that bank accounts have. Under the Treasury program, the government will insure the holdings of any eligible publicly offered money-market fund. The funds must pay a fee to participate in the program. In addition, the Federal Reserve announced two new measures designed to provide liquidity to markets. One extended loans to U.S. depository institutions and bank holding companies to finance their purchases of high-quality ABCP from money market mutual funds, the Asset Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF). To further support market functioning, the Federal Reserve also announced plans to purchase from primary dealers federal agency discount notes, which are short-term debt obligations issued by Fannie Mae, Freddie Mac, and the Federal Home Loan Banks. Agency discount notes amount to about 5% of the assets of the money market mutual fund industry, so the step was another effort to provide liquidity to the market.
6. **The Troubled Assets Relief Program**

After the September events, a new sentiment grew among officials and Wall Street leaders that it was necessary to go beyond piecemeal efforts and develop a systemic approach to fighting the financial meltdown. The scale of the rescues, the amount of liquidity injected by the U.S. authorities and the extent to which markets remained spooked suggested that the “case-by-case” approach taken would not be enough.

After Congress rejected Treasury Secretary Paulson’s US$ 700 billion bailout package on Monday, 29 September, U.S equity markets suffered their worst decline in more than 20 years. The S&P 500 index registered its biggest percentage loss since October 1987, down 8.8%. The Dow was down 7%, and its 777 point one-day loss was the worst ever recorded. Regional bank shares plunged, with the sector index losing more than 24%. Even stronger banks such as JPMorgan and Bank of America suffered large losses, registering a decline of 15% and 17%, respectively. Volatility soared, with the closely watched VIX volatility index moving to a then all-time high of 46.7 from 34.7 (see figure 6). Senate leaders scheduled a second vote for 1 October, hoping to reach an agreement on a broader version of the US$ 700 billion Troubled Assets Relief Program (TARP) that could gain the backing not only of the Senate, but also of the House.

**FIGURE 6**

CHICAGO BOARD OPTIONS EXCHANGE VOLATILITY INDEX – VIX CLOSE: JANUARY 2006 – SEPTEMBER 2008

(Points)

Source: ECLAC, on the basis of data from the Chicago Board Options Exchange.

Note: VIX values greater than 30 are generally associated with a large amount of volatility, while values below 20 generally correspond to less stressful, even complacent, times in the markets.

As it stood before the Monday vote, the package agreed – the Emergency Economic Stabilization Act (EESA) – included some key modifications to Secretary Paulson’s original
proposal: 1) the original amount of US$ 700 billion would be released in installments, with
US$ 250 billion made available immediately, US$ 100 billion upon presidential certification if
results are positive, and the other US$ 350 billion to be available upon both presidential and
congressional approval; 2) taxpayers would get a stake in participating companies and profit
opportunities in the form of equity warrants in return for bad asset purchase to recapitalize
institutions; 3) ability for the government to buy troubled assets from pension plans, local
governments, small banks; 4) selective restriction on executive compensation; 5) independent
oversight board; 6) assistance to homeowners: the government, as owner of mortgages and
mortgage-backed-securities, would help more struggling homeowners to modify the terms of their
home loans.

The extended package that was voted at the Senate on October included two additional
provisions: 1) the temporary lift of the limit on Federal Deposit Insurance Corporation (FDIC)
deposit insurance from US$ 100,000 to US$ 250,000; and 2) the introduction of various tax breaks
for the next two years at a total cost of more than US$ 100 billion. The tax relief proposal would
extend and expand multiple individual and business tax breaks, including tax credits for the
production and use of renewable energy sources; tax credits for R&D; the child tax credit;
protection for millions of families from the alternative minimum tax; and tax relief for victims of
natural disasters.

The proposed increase in the FDIC insured deposit ceiling was generally viewed as positive
in the short-run. The limit hadn’t been increased since 1980, and proponents of raising the limit said
runs on deposits, fueled by consumer fears about the economy, had played a part in the collapse of
IndyMac, a saving and loans institution and mortgage originator in Los Angeles, which was seized
by regulators in July, and Washington Mutual Inc., a savings bank holding company. Higher limits,
they said, would restore confidence in the banking system. The FDIC backed the proposed increase
saying it would benefit both banks, by providing them with liquidity, and depositors, by providing
additional reassurance about the safety of their deposits. Both major presidential candidates and the
Administration endorsed the increase. However, in the long run, analysts say, banks will have to
pay higher fees in order to maintain the FDIC insurance fund. This will come on top of the higher
fees they already face to replenish the fund since IndyMac’s failure in July.

Meanwhile, the Securities and Exchange Commission (SEC) issued guidance that could give
companies’ management more flexibility in valuing securities in situations when markets are
illiquid. It said that in some circumstances it might make more sense to judge assets not on what the
market will bear, but on their intrinsic value – for example, if they are from a highly respected
company that is unlikely to default. The SEC move did not suspend mark-to-market rules, but went
some of the way to address criticism of the accounting regime that critics – including many
conservative Republicans – said had fuelled a downward spiral in credit markets.

D. The credit crunch overtakes emerging markets: October 2008

Policymakers’ efforts to contain the credit crunch continued in October. On 7 October, the Fed
created the Commercial Paper Funding Facility (CPFF) to provide liquidity to term funding
markets. After the original US$ 700 billion U.S. bailout plan was approved by the Congress,
conditions in financial markets started to shift. Following England’s announcement that it would
inject capital directly into banks, the U.S. authorities followed suit, and on 14 October announced
that US$ 250 billion of the bailout money would be used to buy government stakes directly in
banks, the Treasury’s Capital Purchase Program (CPP). The expectation was that the institutions
would use the funds to increase lending.

In addition, the FDIC announced that it would remove deposit insurance limits on non-
interest-bearing accounts and would launch a Temporary Liquidity Guarantee Program (TLGP),
including a guarantee of newly issued senior unsecured debt of banks, thrifts and some holding companies. Senior unsecured debt includes commercial paper, promissory notes and interbank funding, in addition to traditional corporate debt.

On 21 October, in another move to contain the credit crunch, the Federal Reserve announced that it would finance up to US$ 540 billion in purchases of short-term debt from money market mutual funds. The Money Market Investor Funding Facility (MMIFF) would support a private-sector initiative designed to provide liquidity to U.S. money market investors facing large redemptions, which was expected to help reduce money market spreads. The facility was the third that was entirely or partially directed at assisting money market funds, and would operate by offering to purchase 90-day commercial paper and similar instruments from money market funds (see box 2).

**BOX 2**

THE GOVERNMENT RESCUE PLAN

<table>
<thead>
<tr>
<th>Investing in Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>The government is investing US$ 250 billion in senior preferred bank stock, under the following conditions:</td>
</tr>
<tr>
<td>• Half has been invested in nine large banks; half will be available to thousands of small and regional banks.</td>
</tr>
<tr>
<td>• The investments count toward each bank’s base, or Tier 1, capital ratio.</td>
</tr>
<tr>
<td>• The minimum investment will be 1% of risk-weighted assets; the maximum will be up to US$ 25 billion or 3% of risk-weighted assets, whichever is less.</td>
</tr>
<tr>
<td>• Banks will pay dividends of 5% on the investments for the first five years. If the banks have not paid back the investments by then, the rate will jump to 9%.</td>
</tr>
<tr>
<td>• Banks may not pay dividend on other stock until dividends have been paid to the government.</td>
</tr>
<tr>
<td>• The government will not have voting rights, except on matters that may adversely affect the investments, but it will be able to appoint directors if a company misses six quarters of dividends.</td>
</tr>
<tr>
<td>• The preferred stock may be paid back after three years at face value. Alternatively, during that time, the banks may pay back the investments at face value with money raised from outside investors.</td>
</tr>
<tr>
<td>• The government may sell the preferred stock to a third-party.</td>
</tr>
</tbody>
</table>

INCREASING THE INVESTMENT The government will have warrants allowing it to buy 15% of the value of its senior preferred investment in common stock. The price will be based on market prices in the weeks before the government made its investment. If a bank is able to raise an equal amount of capital from investors by the end of 2009, the government will be able to exercise only half of its warrants.

EXECUTIVE COMPENSATION Banks that have received government investments will limit compensation of the top five executives and will limit golden parachutes for those executives. Executives who are compensated based on company performance that is later found to be inaccurate will have to forfeit that compensation. Compensation over US$ 500,000 cash will not be tax-deductible for the company.

**Extending federal deposit insurance**

The FDIC has guaranteed senior debt issued by all banks that it insures through 30 June 2009.

The FDIC has guaranteed the deposits of all noninterest-bearing accounts through 31 December 2009. These accounts are primarily used by businesses to meet payroll and other continuing expenses.

**Buying Commercial Paper**

The Federal Reserve will be able to buy commercial paper with a three-month maturity issued by companies with investment-grade credit ratings.


Note: As presented by the U.S. Government on 14 October 2008.

With the deterioration of the financial and economic situation, the Federal Reserve met two times and cut interest rates by 50 basis points in each meeting, bringing the interest rates to a level of 1%. On 29 October, the Fed also announced that it would lend US$ 120 billion via currency swaps to four key emerging market economies – Brazil, Mexico, South Korea and Singapore –
underscoring the increasing global nature of the credit crisis. The four central banks receiving the dollars would then lend them on to local banks to meet demand for U.S. currency. The move highlighted the spreading of the crisis beyond the developed world and the greater importance of these emerging market countries to the global economy. The Fed said its new dollar swaps would alleviate the difficulties in obtaining dollar funding in fundamentally sound and well managed economies. However, some experts expressed concerns that the Fed and the IMF (which had also recently announced a new short-term facility to support countries with strong policies that face temporary liquidity problems) could aggravate the challenges facing those countries that are not beneficiaries of the new facilities. The hazard that helping some countries might adversely impact others is an international variant of the problems faced by governments when rushed to rescue their banks, fueling pressure on non-bank financial institutions.

1. Credit crunch catches up with emerging markets

Over the month of October, the financial crisis caught up with emerging markets. The financial turmoil in developed markets triggered a liquidation of their holdings of emerging market assets. Borrowing costs for governments in emerging markets heightened to levels that haven’t been seen in six years. Investors were especially frightened of countries with financing needs and weakening economic fundamentals that could tip into a deeper crisis. However, even countries with comparative solid balance sheets saw the situation deteriorate as access to credit tightened, commodity prices weakened and global economic growth slowed sharply.

E. The year ends on a sour note

While the overall economy continued to deteriorate – with severe strain reported by manufacturing companies around the world, as well as job losses – policy makers continued to act in November and December, deploying a range of new and unorthodox tools\(^\text{11}\).

On 5 November, the Federal Reserve changed the formula for interest paid on reserves to make room for the expansion of the Fed’s balance sheet. On 10 November, the Fed and the Treasury announced they were restructuring their financial support to AIG, increasing their help to US$ 150 billion from US$ 123 billion. On 24 November, in a joint announcement, the Treasury, the Federal Deposit Insurance Corporation (FDIC) and the Fed bailed out the Citigroup, making a US$ 20 billion non-recourse loan available (equity injection) and guaranteeing up to US$ 306 billion in troubled assets. On 25 November, the Fed created the Term Asset-Backed Securities Loan Facility (TALF), which will lend up to US$ 200 billion to holders of AAA-rated asset-backed securities, and announced a US$ 600 billion program to purchase up to US$ 100 billion of debt directly issued by Fannie Mae and Freddie Mac and US$ 500 billion of their mortgage-backed securities, sidestepping banks and primary dealers to provide liquidity directly to borrowers or investors in key credit markets.

In December, Fed Chairman Ben Bernanke announced that “the Fed could purchase longer-term Treasury or agency securities on the open market in substantial quantities. This approach might influence the yields on these securities, thus helping to spur aggregate demand” (Bernanke, 2008a). The aim would be to lower long-term rates in the hope to stimulate the economy. The Fed has already started doing something of that sort, by buying up commercial debt from private companies as well as mortgage-backed securities guaranteed by Fannie Mae and Freddie Mac. Investors reacted by pouring money into longer-term Treasury bonds, which briefly pushed already low-yields on 10-year and 30-year Treasuries to new record lows.

\(^{11}\) The National Bureau of Economic Research, the committee of economists responsible for dating the country’s business cycles, declared at the end of 2008 that the U.S. economy officially sank into a recession in December 2007, meaning that the downturn has already been longer than the average for all recessions since World War II.
On 16 December, the Federal Reserve veered into uncharted territory and announced a cut to its target for federal-funds rate to a range of zero to 0.25%, the lowest on record (see figure 7). However, although the cut in the target for the federal-funds rate was larger than expected, it did not have a real impact on the actual funds rate, which had already fallen to around 0.1%. With this cut, the Fed essentially abandoned its traditional policy of using interest rates to manage the economy.

Following the adoption of several unconventional actions to keep the economy afloat, the Federal Reserve’s balance sheet reached US$ 2,248 billion by 31 December 2008, from roughly US$ 900 billion in August. It held a wide range of government and private paper, including US$ 496 billion in “Treasury securities,” US$ 450 billion in “Term auction credit,” US$ 334 billion in commercial paper and US$ 194 billion in “other loans,” which includes US$ 39 billion of credit to AIG alone.

**FIGURE 7**

**FEDERAL FUNDS TARGET RATE**
(Percentage)

Source: ECLAC, on the basis of data from the United States Federal Reserve.
BOX 3
UNITED STATES POLICY RESPONSE TO THE FINANCIAL CRISIS IN 2008

19 December President George W. Bush announces an automotive rescue plan for General Motors and Chrysler LLC that made US$ 17.4 billion in federal loans available. The money will come from the TARP, the US$ 700 billion fund set aside to rescue banks and investment firms in October.12

16 December The Federal Open Market Committee (FOMC) establishes a target range for the federal funds rate of 0 to 1/4 percent.

25 November The Fed announces the creation of the Term Asset-Backed Securities Loan Facility (TALF), a facility that will help market participants meet the credit needs of households and small businesses by supporting the issuance of asset-backed securities (up to US$ 200 billion).

25 November The Fed initiates a program to purchase the direct obligations of housing-related government-sponsored enterprises Fannie Mae, Freddie Mac, and the Federal Home Loan Banks, and mortgage-backed securities backed by Fannie Mae, Freddie Mac, and Ginnie Mae (up to US$ 600 billion).

24 November Citigroup is bailed-out. The Treasury and the Federal Deposit Insurance Corporation will provide protection against the possibility of unusually large losses on an asset pool of approximately US$ 306 billion of loans and securities backed by residential and commercial real estate and other such assets, which will remain on Citigroup’s balance sheet. As a fee for this arrangement, Citigroup will issue preferred shares to the Treasury and FDIC. In addition and if necessary, the Fed stands ready to backstop residual risk in the asset pool through a non-recourse loan. Treasury will also invest US$ 20 billion in Citigroup from the TARP in exchange for preferred stock with an 8% dividend to the Treasury.

10 November The Treasury announces that they are restructuring their financial support to AIG, increasing their help to US$ 150 billion from US$ 123 billion. The US$ 37.8 billion securities lending facility established by the New York Fed on 8 October 2008, will be repaid and terminated.

29 October The FOMC cuts the Federal Funds Target Rate by 50 basis points, to 1 percent (from 1.5 percent).

29 October The Fed grants a currency swap loan to four key emerging market economies, namely Brazil, Mexico, South Korea and Singapore (US$ 30 billion swap lines with each country, totaling US$ 120 billion).

27 October The Fed begins buying commercial paper via CPFF.

27 October The Treasury funds 22 U.S. banks in a second round of recapitalization (US$ 38 billion).

21 October The Fed announces the creation of the Money Market Investor Funding Facility (MMIFF) – an instrument to be applied in purchases of short-term debt from money market mutual funds (up to US$ 540 billion).

14 October The Treasury announces the TARP Capital Purchase Program (CPP), under which it will invest a part of the TARP package to obtain stakes in U.S. banks. Under the program, Treasury will purchase up to US$ 250 billion of senior preferred shares on standardized terms as described in the program’s term sheet. At the moment of the announcement nine large financial institutions had already agreed to participate in the program, including Citigroup, Bank of America, Wells Fargo, Goldman Sachs and JPMorgan Chase.

12 October The Fed approves the acquisition of Wachovia Corporation and its subsidiary banks by Wells Fargo & Company.

8 October The Fed grants an additional loan to AIG US$ 37.8 billion.

8 October The Federal Reserve’s Open Market Committee cuts the Federal Funds Target Rate by 50 basis points, bringing it down from 2 to 1.5 percent. This was a coordinated effort, with the European Central Bank, the Bank of England and the central banks of Canada and Sweden also reducing their primary lending rates by a half percentage point. The Chinese central bank also reduced its key interest rate and lowered bank reserve requirements.

7 October The Fed announces the creation of a Commercial Paper Funding Facility (CPFF) – an instrument designed to help provide liquidity to term funding markets.

7 October The Fed begins paying interest on reserves. The Fed also announces plans to increase its Term Auction Facility (TAF) auctions, eventually bringing the amounts outstanding under the regular TAF program to US$ 600 billion. In addition, the sizes of the two forward TAF auctions to be conducted in November were increased to US$ 150 billion each, so that US$ 900 billion of TAF credit would potentially be outstanding over year end. Fed also allows a depository institution to purchase assets from affiliated money market funds.

3 October Congress passes the Emergency Economic Stabilization Act (EESA), the amended bailout bill (up to US$ 700 billion).

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12 At the end of December the U.S. government deepened its involvement in the U.S. auto industry, committing a further US$ 6 billion to stabilize GMAC LLC, a financing company vital to the future of General Motors Corp. Amounts committed so far under the TARP, in billions, according to the January 12 Treasury report: US$ 250 to financial institutions (including additional funds for Citigroup), US$ 40 to AIG, US$ 25 to Citigroup, US$ 20 to other lending, and US$ 19 for the auto industry.
### Box 3 (concluded)

**29 September** The Fed expands dollar liquidity facilities through 1) an increase in total TAF auctions from US$ 150 billion to US$ 300 billion, all coming in 84-day funds, 2) forward TAF auctions of an additional US$ 150 billion, with the auctions to be conducted in November for Year-end funds, 3) an increase in currency swaps with foreign central banks, taking the total outstanding from US$ 290 billion to US$ 620 billion. In addition, these swap lines were extended through 30 April 2009 from 30 January 2009 previously.13

**22 September** The Fed approves the conversion of the remaining investment banks, Goldman Sachs and Morgan Stanley, to regular bank holding companies.

**19 September** The Treasury presents the **Troubled Assets Relief Program (TARP)**, widely referred to as “bailout package,” which would allow the purchase of illiquid assets from financial institutions (up to US$ 700 billion).

**19 September** The Fed grants non-recourse loans to U.S. depository institutions and bank holding companies to finance their purchases of high-quality asset-backed commercial paper (ABCP) from money market mutual funds (US$ 50 billion credit line).

**18 September** The Fed expands and creates swap lines with the world’s main central banks, injecting US$ 247 billion into financial markets.

**17 September** Treasury sets up the **Temporary Supplemental Financing** program to finance the Fed.

**16 September** The Fed agrees to lend US$ 85 billion in emergency funds to **insurer American International Group Inc. (AIG)**; in return for effective control of the company. In return, the U.S. government will receive a 79.9% equity interest in AIG. The loan was made under the authority of Section 13.3 of the Federal Reserve Act, the same broadly-worded section under which the Fed lent money to Bear Stearns and under which it created the PDCF.

**14 September** Lehman Brothers files for bankruptcy and Merrill Lynch is taken over by Bank of America. The Fed broadens collateral for the Primary Dealer Credit Facility (PDCF) – an instrument that eases the Fed’s lending terms towards primary dealers, and the Term Securities Lending Facility (TSLF), raises frequency of TSLF auctions and provides temporary exception to limitations in section 23A of the Federal Reserve Act (to expire 30 January 2009), allowing all insured depository institutions to provide liquidity to their affiliates for assets typically funded in the tri-party repo market.

**7 September** The Treasury and the Federal Housing Finance Agency (FHFA) announce that the government-sponsored mortgage enterprises **Fannie Mae and Freddie Mac have been placed into governmental “conservatorship.”**

**30 July** The Federal Reserve announces several steps to enhance the effectiveness of its existing liquidity facilities, including the introduction of longer terms to maturity in the TAF. In association with this change, the European Central Bank and the Swiss National Bank adapted the maturity of their operations. The actions taken by the Federal Reserve included: extension of the PDCF and the TSLF through 30 January 200914; the introduction of auctions of options on US$ 50 billion of draws on the TSLF; the introduction of 84-day TAF loans as a complement to 28-day TAF loans; and an increase in the Federal Reserve’s swap line with the European Central Bank to US$ 55 billion from US$ 50 billion.

**20 March** TSLF collateral expanded to include bundled mortgage debt (i.e. AAA Residential MBS) and securities linked to commercial real-estate loan (i.e. AAA Commercial MBS).

**16 March** The Federal Reserve Bank of New York is authorized to create a discount-window-like lending facility for 20 primary dealers – the **PDCF**. The credit extended may be collateralized by a broad range of investment-grade debt securities.

**14 March** The Fed makes an unprecedented loan to **facilitate the sale of the investment bank Bear Stearns** to JPMorgan (US$ 29 billion).

**11 March** **Term Securities Lending Facility (TSLF)** – the Fed lends primary dealers in the bond market up to US$ 200 billion in Treasury securities for a term of 28 days.

**11 March** The FOMC authorizes increases in its existing temporary reciprocal currency arrangements (swap lines) with the European Central Bank and the Swiss National Bank. These arrangements now provide dollars in amounts of up to US$ 30 billion (from US$ 10) and US$ 6 billion (from US$ 2) to the ECB and SNB, respectively.

**7 March** The Fed makes **US$ 200 billion** available to lenders by enhancing its Term Auction Facility (TAF) auctions; another US$ 100 billion in new one-month repurchases operations (US$ 300 billion).

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**Source:** ECLAC on the basis of data from the United States Federal Reserve, Treasury Department and other sources.

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13 On 3 February 2009, the Fed announced that the temporary reciprocal currency swaps were extended from 30 April 2009 to 30 October 2009, in order to address continued pressures in global U.S. dollar funding markets.

14 On 3 February 2009, the Fed announced the extension of the PDCF and TSLF through 30 October 2009, in light of continuing strains in many financial markets.
During a speech at the London School of Economics on 13 January, the Chairman of the Federal Reserve, Ben Bernanke, warned that the need to use taxpayer money to bail out financial institutions in the United States and other countries was still there. According to him, “more capital injections and guarantees may become necessary to ensure stability and the normalization of credit markets.” He warned that fiscal stimulus measures alone would not be enough to overcome the economic crisis, saying that “fiscal actions are unlikely to promote a lasting recovery unless they are accompanied by strong measures to further stabilize and strengthen the financial system.”

Bernanke suggested that the incoming U.S. administration may want to revive the original idea of the rescue plan (the TARP) to buy hard-to-sell mortgage-backed securities and other illiquid assets, removing them from institutions’ balance sheets. According to him, bank capital has been continuously depleted by asset markdowns, needing to be replenished through further capital infusions. To prevent the continued erosion of bank capital and to facilitate lending, he suggested three options to remove troubled assets from banks’ balance sheets. One would be public purchases of these assets, as originally proposed by Mr. Paulson. A second would be for the government to provide asset guarantees in return for warrants. The third would be to “set up and capitalize so-called bad banks, which would purchase assets from financial institutions in exchange for cash and equity in the bad bank.”

Mr. Bernanke said the Fed had already done a great deal to help stimulate the economy, but that it still has “powerful tools” at its disposal. The Fed could help lower mortgage rates by buying longer-term securities. The TALF scheme, unveiled late last year, and to go operational in February, could be “expanded to accommodate higher volumes or additional classes of securities as circumstances warrant.” At present, the US$ 200 billion TALF is restricted to top-rated securities made up of newly issued consumer and small business loans, but with more Treasury risk capital, it could be expanded and extended to other asset classes, such as commercial mortgage-backed securities.

In his speech, Mr. Bernanke argued that the Fed’s approach is different from the quantitative easing policy used by the Bank of Japan from 2001 to 2006 and should be seen as “credit easing” instead. Although both methods involved the expansion of the central banks’ balance sheet, the Fed’s focus has been on reducing credit spreads that are much wider in the United States now than was the case in Japan.

The Chairman sought to calm concerns that the Fed’s actions will fuel inflation. He said that risks of inflation remain low in the near term, but once credit markets begin to recover the Fed will have to “unwind its various lending programs.” Some of this unwinding would “happen automatically” as demand for the Fed’s facilities declined, while other emergency programs would “have to be eliminated” once conditions “substantially normalized.”

Mr. Bernanke also reiterated the need for “stronger supervisory and regulatory systems” while being careful not to introduce rules that would “forfeit economic benefits of financial innovation and market discipline.” “Even as we strive to stabilize financial markets and institutions worldwide, however, we also owe the public near-term, concrete actions to limit the probability and severity of future crisis,” he said.

Finally, he highlighted the importance of international cooperation to deal successfully with the crisis. “A clear lesson of the recent period is that the world is too interconnected for nations to go it alone in their economic, financial, and regulatory policies” (Bernanke, 2009).
III. The impact on Latin American financial markets

Latin American markets felt the effects of the crisis through a slowdown in capital inflows, large declines in stock price indexes, significant currency adjustments and an increase in debt spreads. Volatility soared, with the closely watched Chicago Board Options Exchange Volatility Index moving to an all-time high of 80.06 on 27 October and of 80.86 in 20 November (see figure 8), indicating that fear (rather than greed) has been ruling the markets. This time around the region is better positioned to weather the crisis than in the past, given improvements in macroeconomic and financial policies as well as a reduced net dependency on external capital inflows, though the region’s fastest expansion in 40 years has now come to a halt, as the global credit crunch makes financing scarce and squeezes demand for the region’s commodities15.

After reaching record lows in May 2007, emerging markets bond spreads began to widen, surpassing pre-Asian crisis levels by August 2008 (see figure 9). The ongoing lack of liquidity and subsequent liquidation of assets is leading to a collapse in asset prices and a sharp widening in spreads. In October 2008, daily spreads rose to levels not seen since December 2002, making it much more difficult for governments that need financing to get it.

15 From 2003 to 2008 the region grew at an average annual rate of close to 5%. The financial crisis will bring growth to only 1.9% in 2009, according to ECLAC estimates, as capital flows to the region reverse from the steady inflows observed in recent years, and terms-of-trade deteriorate (ECLAC, 2008).
FIGURE 8
CHICAGO BOARD OPTIONS EXCHANGE VOLATILITY INDEX – VIX CLOSE: 1997 - 2008

Source: ECLAC, on the basis of data from the Chicago Board Options Exchange.

Note: VIX values greater than 30 are generally associated with a large amount of volatility, while values below 20 generally correspond to less stressful, even complacent, times in the markets.

FIGURE 9
(Basis Points)

Source: ECLAC, on the basis of data from the JPMorgan, *Emerging Markets Bond Index.*
Risk premiums for Latin corporates and sovereigns have risen substantially, but have remained well below U.S. junk (high-yield) bonds (see figure 10). Latin corporates have faced a steep rise in foreign exchange borrowing costs (although less than firms in other emerging markets (see figure 11), which raises concerns that refinancing risks will climb.

**FIGURE 10**
**HIGH YIELD VS. EMERGING MARKET SPREADS: 2007 – 2008**
*(Basis points)*

![Graph showing high yield vs. emerging market spreads](image)

Source: ECLAC, on the basis of data from Merrill Lynch U.S. High-Yield Master II Index (H0A0), and JPMorgan EMBI+.

**FIGURE 11**
**JPMORGAN CORPORATE EMERGING MARKET BOND INDEX SPREADS: 2007 – 2008**
*(Basis points)*

![Graph showing JPMorgan corporate emerging market bond index spreads](image)

Source: ECLAC, on the basis of data from Merrill Lynch U.S. High-Yield Master II Index (H0A0), and JPMorgan EMBI+.
Emerging markets’ vulnerabilities have been more focused on corporates, as sovereigns have improved public debt dynamics and countries’ financing needs are under control. Market performance has been driven by the rapid deterioration of emerging markets bank and corporate market, as well as ongoing losses in emerging markets equities. In 2008, the Morgan Stanley Capital International (MSCI) Latin American Index lost 53%, while the Emerging Markets Index lost 56% and the G7 Index lost 43% (see figure 12). While in 2007 the Latin America component gained 47%, almost nine times as much as the MSCI-G7 index for developed markets, since mid-September 2008 stocks in Latin America have been doing worse than stocks in developed countries, as concerns about access to credit and the adverse impact of sharp falls in commodity prices and in local currencies contribute to increased risk aversion and to outflows of capital.

**FIGURE 12**

**MORGAN STANLEY CAPITAL INTERNATIONAL EQUITY PRICE INDEX (USD): 2008**

![Graph showing the MSCI Capital International Equity Price Index (USD) for 2008](source)

Source: ECLAC, on the basis of data from the MSCI Equity Indices, [http://www.msci.com/equity/index2.html](http://www.msci.com/equity/index2.html)

Note: Prices at the end of the month.

Many governments in the region have used revenue from the commodity boom to pay down debt and build reserves. Now, facing a global financial crisis and the threat of recession in developed countries, the biggest question for Latin America is how long and deep this cyclical downturn will be, and how much it is going to reduce commodity prices. Prices for commodities such as soy, gold, copper and oil, which helped fund the region’s boom, fell more than 50% in the second half of 2008 (since their 2 July high), according to the Reuters-Jeffries Commodities Research Bureau (RJ/CRB) Commodity Price Index.

As risk aversion increases, investors are rapidly pulling out massive amounts of money, creating problems for local markets and banks. There is an ongoing shortage of dollars (as investors liquidate assets in Latin American markets), and as currencies depreciate, inflation concerns increase despite the global slowdown. In Brazil and Mexico, central banks deployed billions of
dollars of reserves to stem steep currency declines, as companies in these countries, believing their local currencies would continue to strengthen against the U.S. dollar, took debts in dollars. Some companies also made bets using currency derivatives that have led to losses in the billions of dollars. Dramatic currency swings have caused heavy losses for many companies, from Mexico’s cement giant Cemex SAB to the Brazilian conglomerate Grupo Votorantim. Mexico’s third-largest retailer, Controladora Comercial Mexicana, declared bankruptcy recently after reporting huge losses related to exchange rate bets. As concerns about corporate exposure to dollar-denominated derivatives increases, yields on bonds issued by many of Brazil’s and Mexico’s leading companies have started to rise, sharply raising the cost of issuing new debt. Latin American external debt issuance came to a halt in the third quarter of 2008, totaling only US$ 690 million. In the fourth quarter of 2008, there was only one issuance by Mexico, a 10-year US$ 2 billion benchmark bond in mid-December.

The cost of obtaining loans for capital expenditures, M&A and debt refinancing has also risen substantially for Latin American corporates amid contagion from the U.S. financial crisis. According to bankers, a protracted trend of shortening tenors and widening spreads has intensified as bank lending quickly follows the way of bonds and equity.

As local banks contend with the spreading of the financial crisis, a pattern of consolidation may emerge. Brazilian banks are preparing for a wave of consolidation following the merger of Itaú and Unibanco in the first week of November 2008. It is estimated that the combined banks would have a market value of US$ 41.3 billion according to Economática, a São Paulo-based consultancy, making it the biggest bank in South America, and the sixth largest bank in the Americas. According to executives of the two banks, the new institution has now the capacity to act on a global scale, and the goal is to become a global player within five years. Consolidation will be helped by recent government measures to inject liquidity into the banking system.

In summary, over the past six years emerging market countries built a cushion of foreign exchange reserves, by keeping exchange rates competitive, boosting exports and reducing imports. Emerging market countries and foreign partners are entwined, however, and there is no way to get away from interdependence (Subramanian, 2008). In Latin America, exporters were the first to start posting losses on their hedging structures (built to reduce costs by betting on the strength of domestic currencies), which led to further currency depreciation. The foreign-exchange derivatives that were meant to limit companies’ exposure to currency moves ended up aggravating it instead. Funding difficulties, the economic slowdown in major markets, the sharp decline in commodity prices and potential illiquidity in local markets, have now raised questions on whether fundamental problems will emerge in many countries of the region. Latin American countries are trying to respond to the spiraling turmoil, however, taking measures to mitigate the negative impact of the credit crunch. The actions taken involve a mix of financial measures and provision of liquidity (including smaller reserve requirements), and fiscal measures, including investment in infrastructure, sectoral policies (support to small- and medium sized-enterprises (SMEs), housing, agricultural sector, tourism, auto industry, etc.), support to exporters, including foreign exchange swaps, new credit lines and tariff reductions, and social and labor policies (see box 4).

**BOX 4**

**INITIAL POLICY RESPONSE FROM WITHIN THE REGION**

The effects of the international financial crisis have differed from country to country, and the countries’ capacity and availability of resources to respond have differed as well, thus the range of measures implemented in the region has been quite wide so far. Although not all countries in the region have had the capacity to launch fiscal stimulus plans, most have moved quickly to support the financial sector and provide liquidity. There has been a marked contrast between the scope of the policies announced in certain South American countries relative to some of the Central American and Caribbean States. This certainly reflects differing capacities to implement countercyclical policies. The following is a list of measures adopted by a selected sample of countries, as of 22 January 2009:
Box 4 (concluded)

Argentina: the central bank has intervened in the spot and non-deliverable forward (NDF) markets, and has bought government bonds. The foreign currency requirements have been cut to boost export financing, and put options for holders of central bank bills and notes (LEBAC and NOBAC) have been created. The government has also announced the nationalization of the private pension system (making US$ 13 billion in net resources – close to 4% of the GDP – available to the government). In terms of fiscal policy, the government has launched a plan of US$ 21 billion for public works (which has already been expanded to US$ 32 billion) and credit lines of US$ 3.8 billion to stimulate consumption, investment, labor and production, including consumption credit up to US$ 2 billion to electro domestic goods and vehicles, US$ 360 million credit for pre-financing exports and loans for labor capital, and US$ 864 million for small- and medium-sized businesses (SMEs). The agricultural sector will receive US$ 500 million.

Brazil: the central bank announced US$ 50 billion in foreign exchange swaps auctions in October 2008, has increased flexibility on reserve requirements usage, has sold dollars in the spot market, and has halted the tightening cycle. The measures proposed have focused on tax reduction and corporate support. Tax reduction: income taxes reduction, and reduction to half (from 3 to 1.5%) of the tax on financial transactions (IOF), amounting to a cost of US$ 3.5 billion. The tax on purchases of low-price vehicles was reduced to zero. Corporate support: part of the central bank reserves will be used to finance credit lines to public and private enterprises with foreign debt, which were heavily hit by the real devaluation, totaling US$ 10 billion. A sovereign wealth fund amounting to US$ 5.9 billion was created as an additional countercyclical measure to reduce the impact of the crisis. On 22 January 2009, the government announced a US$ 43.2 billion credit line to promote corporate investment intermediated via the state-owned Brazilian Development Bank (BNDES). The finance minister said the funds will be used to support investment spending in key strategic areas such as energy and infrastructure, and indicated that a large part of the funds will be lent to the state-owned oil company, Petrobras. The minister added that the development bank would have to condition new corporate loans on commitments by the borrower not to fire workers.

Chile: the central bank has injected liquidity into the interbank market through foreign exchange swaps issuance; it has done repo (short-term funding) operations, expanded currency swap tenors, and modified the reserve requirement rule to enable banks to include currency denominations other than dollars. The central bank has also interrupted the tightening cycle and daily purchases of U.S. dollars. On 5 November 2008, President Michelle Bachelet announced US$ 1.15 billion in measures (or 0.6% of GDP) to improve liquidity conditions and stimulate access to credit for homebuyers and SMEs. The government will inject US$ 500 million into state-owned Banco Estado to increase mortgage lending, and will channel about US$ 550 million to ease lending to qualifying small businesses. In addition, the revenue service will speed up tax returns for SMEs, while additional and transitory subsidies were added to low income families. On 6 January 2009, President Bachelet announced a further US$ 4 billion economic stimulus package, equivalent to 2.8% of GDP. The plan is a mix of new spending, subsidies and targeted income transfers to low-income families, measures to facilitate access to credit, and tax cuts. The package includes a US$ 750 million increase in public investment in infrastructure to create 100,000 jobs; the temporary elimination of the financial transactions stamp duty in 2009; a reduction of corporate income tax prepayment; creation of a subsidy for hiring younger workers; establishment of tax incentives for training to minimize layoffs; a one-time US$ 64 per dependent payment to the poorest 1.7 million families under the Chile Solidario scheme; and US$ 1 billion for the state-owned copper giant, Codelco, after copper prices fell 54% in 2008. The countercyclical measures are expected to help cushion the slowdown.

Colombia: the central bank stopped daily foreign exchange purchases and the government eliminated capital controls for equity and fixed income investments. The government has also announced that it will obtain US$ 2.4 billion in funding from multilaterals (IADB, World Bank and CAF) to cover external financing needs in 2009, and that it will increase spending in infrastructure up to COP 9.7 billion in 2009. Social spending has also increased.

Mexico: the finance ministry and Banxico announced several measures to help normalize the functioning of financial markets in October 2008, including a sharp reduction in long-term bond sales (10, 20 and 30 years). Authorities increased the buy-back of medium- and long-term bonds (up to MZN 40 billion). The central bank will also offer a swap from fixed rate to floating, in order to smooth the duration impact in the portfolios, and it is also selling dollars in the spot market. The government has announced that it will increase the funding from multilaterals in 2008 and 2009 by US$ 5 billion, gaining funding flexibility. In January 2008, President Felipe Calderón announced an economic stimulus package, “Acuerdo Nacional en Favor de la Economía Familiar,” whose key elements are a cut in the price of cooking gas (of 10%) and a freezing of petrol prices, as well as measures aimed at preserving jobs. The program entails an increase of US$ 2.3 billion for spending on infrastructure, and a proposal to expand in 40% the temporary workers’ program. The finance ministry says the package will boost GDP by about 1%.

Peru: the central bank reduced reserve requirements, interrupted the tightening cycle and is selling dollars in the spot market. The government also presented a stimulus package of up to US$ 3.2 billion. Most of the funds will be directed to public infrastructure projects and construction, including credit lines for housing and small businesses.


According to ECLAC estimates, Latin America and the Caribbean will grow at an annual average rate of only 1.9% in 2009. As mentioned earlier, commodity prices have declined by more than half from their peak, stock market valuations have also declined, and currencies in many

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16 A cash-settled, short-term forward contract on a thinly traded or non-convertible foreign currency.
Latin American countries have depreciated as capital left the region. The corporate sector in the region is more vulnerable than the public sector, with private enterprises holding “toxic” assets to a surprising large extent. In this situation, policy makers will need to strike a balance between the need to stimulate the economy and to stabilize the financial sector. With high financing requirements and with emerging market borrowers expected to be crowded out of international credit markets by the government bonds expected to be issued by the big developed economies in 2009, access to the international financial institutions (IFIs) will be a necessity for many countries of the region. The recent G20 meeting that took place in the United States in November 2008 is an indication that major changes have occurred in the global economy, and these international organizations may be on the path to give greater representation to emerging economies and to show greater lending flexibility.

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17 Analysts warn that emerging market borrowers could be crowded out of the credit markets by US$ 3 trillion of government bonds expected to be issued by the big developed economies in 2009, three times more than in 2008. Refinancing risk will likely be one of the biggest problems for emerging market issuers in 2009.

18 Looking to boost the finances of Latin American countries affected by the global financial crisis, multilateral institutions have offered the region more loans. The Inter-American Development Bank (IADB), the Andean Development Corporation (CAF), the World Bank’s International Finance Corporation (IFC) and the Latin American Reserve Fund (FLAR) have announced almost US$ 10 billion in fresh credit lines, with the goal to safeguarding growth and employment through crisis. Colombia, for instance, has secured 2009 foreign financing with loans from multilaterals. The government will get US$ 1 billion from the World Bank, US$ 1 billion from the IADB and US$ 400 million from CAF, following deals struck during the annual meetings of the International Monetary Fund (IMF) and the World Bank in September 2008. The IMF has also announced a new short-term facility, which has been established to support countries with strong policies that face temporary liquidity problems. The new facility will be quick disbursing, short-term financing using IMF resources.
IV. Moving Forward

A. The G20 Summit: an important first step

After the collapse of Lehman Brothers, the world’s financial system began to unravel, leading to an economic slowdown that has spread across all leading economies. The financial crisis now shaking up the world is the result of failings in financial governance at the domestic level that have also called attention to the existence of mismatches and gaps in the governance of international finance and capital at the global level. Former-U.S. President George W. Bush invited the leaders of the countries comprising the “Group of 20” to Washington, D.C. on 15 November 2008, to discuss the current global financial crisis, following Britain and France’s calls for a meeting that followed the spirit of the original 1944 Bretton Woods gathering. This was the first meeting of G20 countries at the level of Heads of State.

The G20 leaders were faced with two important issues: what to do about a crisis that is truly global, and what to do about long-term regulatory issues and the need to reform the international financial architecture. The discussions focused on the short-term stabilization of financial markets, as well as on the discussion of broad principles of regulatory and capital market reforms, and the role of global institutional structures, including the role of the international financial institutions (see box 5). The G20 countries plan to continue the discussion of preventive measures to avoid similar crisis in the future, concentrating on a workable set of financial regulatory reforms that address the major regulatory failings and gaps revealed in this crisis. The G20 will meet again in April 2009, indicating that this body, and
not the Group of Seven industrialized countries, may play the leading role during the crisis, providing a more effective and representative discussion forum for global economic issues.

BOX 5
WHITE HOUSE FACT SHEET: SUMMIT ON FINANCIAL MARKETS AND THE WORLD ECONOMY

The Summit achieved five key objectives. The leaders:

- Reached a common understanding of the root causes of the global crisis;
- Reviewed actions countries have taken and will take to address the immediate crisis and strengthen growth;
- Agreed on common principles for reforming our financial markets;
- Launched an action plan to implement those principles and asked ministers to develop further specific recommendations that will be reviewed by leaders at a subsequent summit; and
- Reaffirmed their commitment to free market principles.

The leaders agreed that immediate steps could be taken or considered to restore growth and support emerging market economies by:

- Continuing to take whatever further actions are necessary to stabilize the financial system;
- Recognizing the importance of monetary policy support and using fiscal measures, as appropriate;
- Providing liquidity to help unfreeze credit markets; and
- Ensuring that the International Monetary Fund (IMF), World Bank and other multilateral development banks (MDBs) have sufficient resources to assist developing countries affected by the crisis, as well as provide trade and infrastructure financing.

The Leaders Agreed On Common Principles To Guide Financial Market Reform:

- **Strengthening transparency and accountability** by enhancing required disclosure on complex financial products; ensuring complete and accurate disclosure by firms of their financial condition; and aligning incentives to avoid excessive risk-taking.
- **Enhancing sound regulation** by ensuring strong oversight of credit rating agencies; prudent risk management; and oversight or regulation of all financial markets, products, and participants as appropriate to their circumstances.
- **Promoting integrity in financial markets** by preventing market manipulation and fraud, helping avoid conflicts of interest, and protecting against use of the financial system to support terrorism, drug trafficking, or other illegal activities.
- **Reforming international cooperation** by making national laws and regulations more consistent and encouraging regulators to enhance their coordination and cooperation across all segments of financial markets.
- **Reforming international financial institutions** (IFIs) by modernizing their governance and membership so that emerging market economies and developing countries have greater voice and representation, by working together to better identify vulnerabilities and anticipate stresses, and by acting swiftly to play a key role in crisis response.

G20 Nations Will Continue To Take The Right Steps To Get Through This Crisis

The leaders approved an Action Plan that sets forth a comprehensive work plan to implement these principles, and asked finance ministers to work to ensure that the Action Plan is fully and vigorously implemented. The Plan includes immediate actions to:

- Address weaknesses in accounting and disclosure standards for off-balance sheet vehicles;
- Ensure that credit rating agencies meet the highest standards and avoid conflicts of interest, provide greater disclosure to investors, and differentiate ratings for complex products;
- Ensure that firms maintain adequate capital, and set out strengthened capital requirements for banks’ structured credit and securitization activities;
- Develop enhanced guidance to strengthen banks’ risk management practices, and ensure that firms develop processes that look at whether they are accumulating too much risk;
- Establish processes whereby national supervisors who oversee globally active financial institutions meet together and share information; and
- Expand the Financial Stability Forum to include a broader membership of emerging economies.
Box 5 (concluded)

The leaders instructed finance ministers to make specific recommendations in the following areas:

- Avoiding regulatory policies that exacerbate the ups and downs of the business cycle;
- Reviewing and aligning global accounting standards, particularly for complex securities in times of stress;
- Strengthening transparency of credit derivatives markets and reducing their systemic risks;
- Reviewing incentives for risk-taking and innovation reflected in compensation practices; and
- Reviewing the mandates, governance, and resource requirements of the IFIs.

The leaders agreed that needed reforms will be successful only if they are grounded in a commitment to free market principles, including the rule of law, respect for private property, open trade and investment, competitive markets, and efficient, effectively-regulated financial systems. The leaders further agreed to:

- Reject protectionism, which exacerbates rather than mitigates financial and economic challenges;
- Strive to reach an agreement this year on modalities that leads to an ambitious outcome to the Doha Round of World Trade Organization negotiations;
- Refrain from imposing any new trade or investment barriers for the next 12 months; and
- Reaffirm development assistance commitments and urge both developed and emerging economies to undertake commitments consistent with their capacities and roles in the global economy.


B. How to move forward

The financial crisis and credit crunch have revealed regulatory and financial governance failings, as well as gaps in the international financial system. The first concern is to try to stabilize global financial markets, so that the global economy can move forward. Current and past crisis management in developed and emerging market countries have highlighted broad principles that have been important and should be followed (Goldstein, 2008):

- The recent rapid increase in financial globalization indicates that international coordination is imperative, and central banks should continue to coordinate actions, such as interest rates cuts or currency swap arrangements;
- Countries should continue to closely monitor the capital adequacy and lending behavior of their systemically-important financial institutions and be prepared to intervene when necessary;
- In case of disorderly exchange rate markets, countries should cooperate closely, including the possibility of coordinated intervention;
- The IMF should provide quick-disbursing loans to emerging and developing countries with severe but temporary balance of payments problems, and the World Bank and multilateral development banks should increase efforts to mitigate the effects of the crisis on the most vulnerable countries, while also holding G7 members to their Gleneagles commitment to increase development assistance;
- Past crisis show that countries should refrain from protectionist trade measures.

The reform of the international financial architecture has come to the fore. The mere fact that the summit was of the G20 rather than the G7 already suggests a shift in global power.
V. Concluding remarks

“The exuberance of the boom, which led bankers to make loans to people who could not repay them, has given way to a seemingly intractable fear of making any loans at all.” (Dash and Bajaj, 2008)

The most important lesson of 2008 is how fragile confidence is. Despite all the measures already taken by governments, banks were still reluctant to lend money by the end of the year, even after receiving millions, and in some cases billions, of dollars from the government. The lack of confidence in the global financial system has driven the global economy into recession and has disrupted the global financial market, that’s why banks are still unsure about lending to one another or to qualified borrowers. If confidence isn’t restored, the global economy and the world financial markets will remain disrupted and searching for a bottom.

According to Federal Reserve data, banks’ holdings of cash have nearly tripled to just over US$ 1 trillion in the last three months of 2008. Investors are not sure what the U.S. government’s next step will be, when it will intervene and when it won’t, thus as long as the rules of the game are not clear, credit will not unlock. To make further progress, it may be necessary to build investor confidence by clarifying exactly how the new government programs will affect the economy.
Another important lesson of 2008 is that the world is interconnected, and given the global nature of the current crisis, it is important to coordinate the policy response at the global level. The first priority is to stabilize and strengthen the global financial system, but it is also necessary to discuss how to reform the international financial architecture in order to update the governance of international finance and capital at the world level. A framework for systemic scrutiny has been lacking. Providing the necessary architecture and instruments to produce a more effective response to the build-up of systemic pressures should be an important goal for developed and emerging market economies alike (Large, 2008).
Bibliography

ECLAC (Economic Commission for Latin America and the Caribbean) (2009), *La reacción de los gobiernos de América Latina y el Caribe frente a la crisis internacional*, forthcoming.

___ (2008), *Preliminary overview of the economies of Latin America and the Caribbean, 2008*, (LC/G.2401-P), Santiago, Chile, United Nations Publication, Sales No. E.08.II.G.2.


___ (2008b), Statement before the U.S. House of Representatives Committee on Oversight and Government Reform, 13 November.


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